Hazardous fuel will be removed to create defensible space where a wildfire will be easier to control. These projects will mostly be done around park structures to protect life and property.





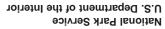
Prescribed fire will be used as a resource management tool to preserve and protect park resources. The use of prescribed fire will be based on fire history.

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## Fire Management at Pinnacles

National Park Service
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Pinnacles National Monument





## Fire in the park



Fire is a natural process that has shaped the plant communities at Pinnacles National Monument. Research suggests that fires as large as 2,500 acres or more have occurred approximately every 9 years in the area that includes the park. The average fire cycle in any one place is 40 years. The goal of the new fire management plan is to mimic these conditions, to help native species thrive.

Park managers will consider using prescribed fire in areas that have not burned for a long time or where ecosystems have

been altered by negative human impacts. Prescribed fire will only be used when weather

conditions are safe for burning. Fire recycles nutrients and creates different

Pinnacles, such as the rush rose, only flourish after a fire. Without fire, the park's biodiversity would decline.

The complex vegetation at Pinnacles includes 5 kinds of chaparral, as well as riparian, oak savanna, grassland and more, but is simplified into 3 basic fuel types -- grassland (green), light brush (brown), and heavy brush (gold).

## Using fire to restore ecosystems



Yellow star thistle (Centaurea solstitalis) is one of the most invasive non-native species in the western United States. Some of the habitat invaded at Pinnacles can no longer support California red-legged frogs, one of the threatened species in the park.

photo by Jo-Ann Ordano, courtesy of California Academy of Sciences

New lands recently acquired at Pinnacles National Monument include rare valley oak savannas and pockets of wetlands, which transition into hillsides of native buckweat and chaparral. This 2,000 acre addition to the park also includes an 80-acre infestation of non-native yellow star thistle. This infestation threatens to spread throughout the Monument and onto adjacent lands.

Studies show that prescribed fire is an effective control technique when used on yellow star thistle for at least 3 consecutive years. This treatment has been proposed for the new lands at Pinnacles. After an environmental review has been completed, burning may take place in late spring, when yellow star thistle is just beginning to flower, so the release of more seed will be prevented. Burning will be followed by planting native seed and propagules of grasses, forbs, trees and shrubs in small experimental test plots to determine successful revegetation techniques. These species include deer grass, which is widely used in traditional basket making, and purple needlegrass, which once dominated many California landscapes, providing sustenance for people and wildlife.

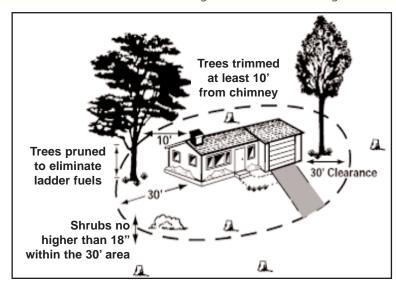


## **Defensible space and fire safety**

When the weather is very hot and dry, fire can be a threat. The Pinnacles fire management plan includes removing fuel from around park buildings to create defensible space. This is also how you can protect your home from wildfire - by clearing away vegetation and other flammable materials.

**Defensible space** is the space between a structure and surrounding vegetation which makes it possible for firefighters to safely defend a structure. It may also allow a structure to survive on its own. General guidelines are:

- Keep grass mowed to 3 inches or less
- Remove all dead vegetation material
- Separate shrubs by twice their height
- Separate tree crowns by 10 feet or more
- Limb trees10 feet off the ground or 1/3 their height



For more information on future fire management projects, contact:

Pinnacles National Monument
Division of Interpretation and Education
831-389-4485 x265